

Supplementary Information

Drugs – Real World Outcomes

Burden of Repeated Hospitalizations on Patients with Heart Failure: An Analysis of Administrative and Claims Data in Japan

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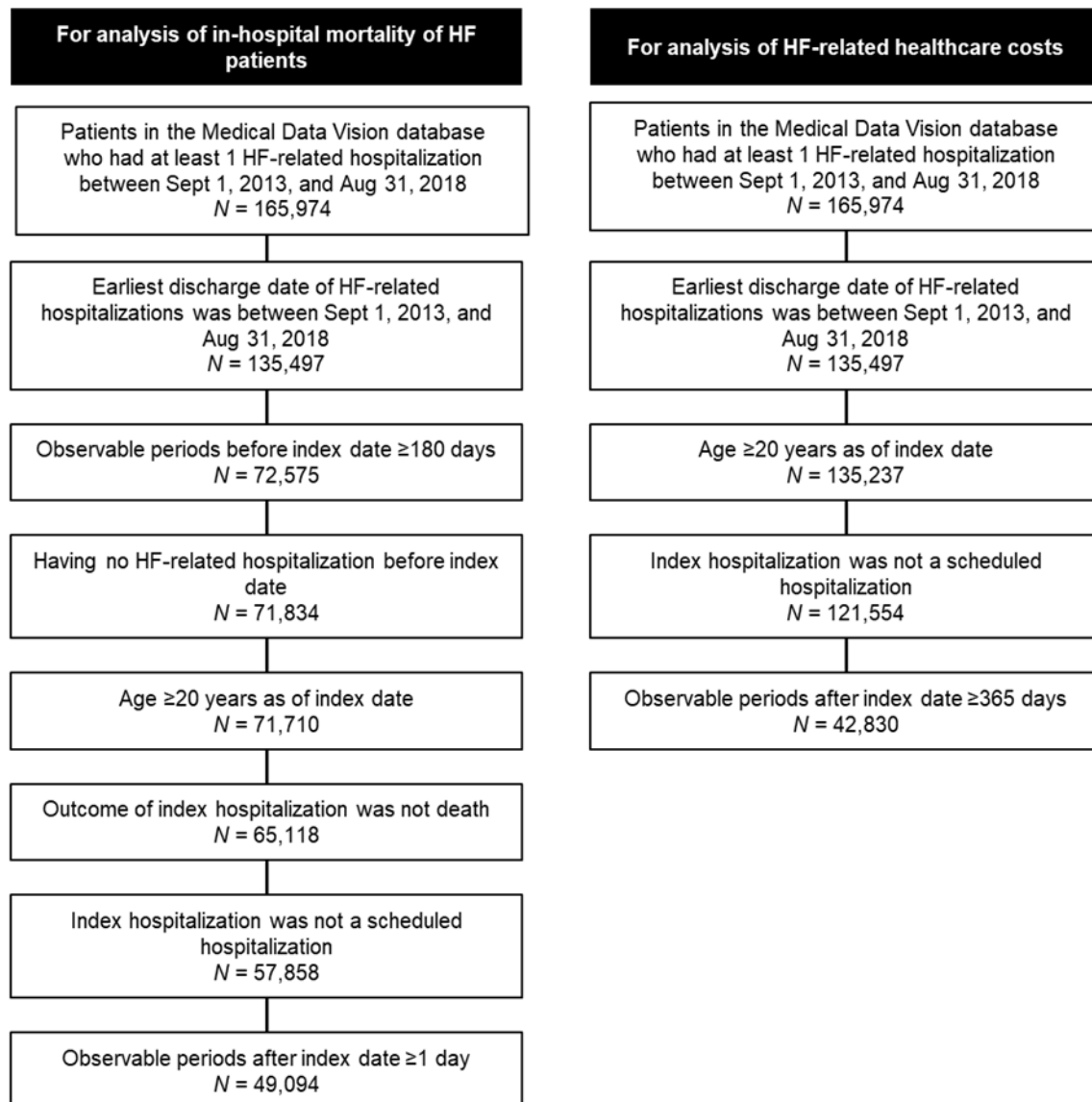
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Supplementary Figure 1 Study attrition flow



HF, heart failure

Supplementary Table 1 Characteristics of patients included in the healthcare cost analysis

Patient characteristics at index hospitalization	N = 42,830
Age ≥20 years as of index date	76.8±12.2
Age ≥80 years	21,236 (49.6)
Sex, female	20,088 (46.9)
Body mass index ^a , kg/m ²	23.4±4.8
<18.5 kg/m ²	4684 (11.7)
NYHA functional class ^b	2.9±0.9
Comorbidities/Etiology	
Hypertension	32,077 (74.9)
Diabetes mellitus	23,289 (54.4)
Ischemic heart disease	23,671 (55.3)
Atrial fibrillation	17,570 (41.0)
Hyperuricemia	12,860 (30.0)
Valvular heart disease	12,696 (29.6)
Cancer	9743 (22.7)
Chronic renal failure	9260 (21.6)
Stroke	8883 (20.7)
Cardiomyopathy	3071 (7.2)
Dementia	2678 (6.3)
Ventricular tachycardia	1915 (4.5)
Chronic obstructive pulmonary disease	1807 (4.2)
Liver cirrhosis	1085 (2.5)
Hyponatremia	532 (1.2)
Smoking history ^c	13,103 (34.3)
Charlson Comorbidity Index	3.9±3.0
ADL score at discharge ^d	17±5.4
Length of hospital stay	22.5±18.9
Treatments at index hospitalization	
Diuretics	30,640 (71.5)
Vasodilator	26,669 (62.3)
Carperitide	16,977 (39.6)
Cardiac rehabilitation	16,155 (37.7)
Vasodilator other than carperitide	9692 (22.6)
Inotropic	7065 (16.5)

Ventilation		7029 (16.4)
ICU		3931 (9.2)
PCI		369 (0.9)
CPAP		9 (0.0)
Drug prescription at discharge		
Loop diuretic		31,992 (74.7)
ACEi/ARB		23,300 (54.4)
β-blocker		22,937 (53.6)
MRA		16,625 (38.8)
ARB		13,779 (32.2)
ACEi		9944 (23.2)
Tolvaptan		3853 (9.0)
Inotropic		1824 (4.3)
Laboratory test		
BNP, pg/mL	<i>n</i> = 2085	800±815
Creatinine, mg/dL	<i>n</i> = 4377	1.5±1.6
eGFR, mL/min/1.73 m ²	<i>n</i> = 4377	49±25.0
Sodium, mmol/L	<i>n</i> = 4376	140±5.0
Potassium, mmol/L	<i>n</i> = 4375	4.2±0.7
Hemoglobin, g/L	<i>n</i> = 4351	11.9±2.5
Uric acid, mg/dL	<i>n</i> = 3237	6.6±2.2

Data are presented as *n* (%) or mean ± standard deviation.

ACEi indicates angiotensin-converting enzyme inhibitor; ADL, activities of daily living; ARB, angiotensin II receptor blocker; BNP, brain natriuretic peptide; CPAP, continuous positive airway pressure; eGFR, estimated glomerular filtration rate; ICU, intensive care unit; MRA, mineralocorticoid receptor antagonist; NYHA, New York Heart Association; PCI, percutaneous coronary intervention.

^a*n* = 39,917

^b*n* = 30,462

^c*n* = 38,239

^d*n* = 36,674